

ALABAMA DEPARTMENT OF TRANSPORTATION

Bureau of County Transportation

1409 Coliseum Blvd., Montgomery, Alabama 36110-2060 Phone: (334) 242-6206 FAX: (334) 353-6530

Internet: http://www.dot.state.al.us



Bob Riley Governor

Joe McInnes Transportation Director

July 12, 2007

MEMORANDUM 2007-14

County Engineers To:

Cc: Division County Transportation Engineers

From:

D. E. (Ed) Phillips, Jr., P.E. State County Transportation Engineer

National Transportation Safety Board Reference:

Safety Recommendation H-04-15

Anchored-in-Backslope Guardrail Terminals

Please find attached correspondence from Mr. William Adams, P.E., State Design Engineer, and Transportation Director McInnes, dated July 9, 2007 and July 6, 2007 respectively. Pursuant to this correspondence, this office recommends that each county identify and replace any existing Type 9 end anchors that terminate within the clear zone. The replacement should be with an adequate guardrail length and an approach end anchor.

By copy, I am asking the Division County Transportation Engineers to keep this in mind when scoping county projects containing State or Federal-Aid and when conducting PS&E reviews to insure that any existing Type 9 end anchors that terminate within the clear zone are replaced with an adequate guardrail length and an approach end anchor.

If you should have any questions or comments concerning this matter, please feel free to contact me at (334) 242-6203.

DEP/dep

Mr. Joe McInnes, Transportation Director Pc:

Mr. Don Vaughn, P.E., Chief Engineer/Deputy Director

Mr. Don Arkle, P.E., Assistant Chief Engineer, Policy & Planning

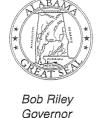
Mr. Mack Lovelady, P.E., Assistant State County Transportation Engineer

Mr. Don Harris, P.E., Assistant State County Transportation Engineer

Mr. Ed Austin, P.E., Assistant State County Transportation Engineer

Mr. Buddy Sharpless, ACCA

File



ALABAMA DEPARTMENT OF TRANSPORTATION

1409 Coliseum Boulevard, Montgomery, Alabama 36110

July 9, 2007

To:

Division Engineers

County Transportation Engineer

Maintenance Engineer Construction Engineer

From: William Adams, P.E.

State Design Engineer

Re:

National Transportation Safety Board

Safety Recommendation H-04-15

Anchored-in-Backslope Guardrail Terminals

Attached is a letter from Mr. McInnes to the National Transportation Safety Board in response to a crash in Tennessee that involved a 15 passenger van that rode over the top of an anchored-in-backslope guardrail terminal (ALDOT's Type 9 end anchor). The vehicle proceeded to strike a hazard behind the guardrail.

In order to comply with the NTSB's recommendation please identify and replace any existing Type 9 end anchors that terminate within the clear zone. The replacement should be with an adequate guardrail length and an approach end anchor. This should be accomplished on the next resurfacing project or any other project in the vicinity of the terminal on which guardrail work would be an appropriate item.

The Type 9 end anchor can still be an appropriate end anchor if installed beyond the clear zone. The 2007 Standard Drawing has been revised to be in accordance with the Report 350 crash tested design. This revision provides for grading requirements and a lower rubrail when traversing the cut ditch.

Please advise if additional information is needed.

Cc:

Roadway Design Engineer

Consultant Management Engineer

Traffic Design Engineer Quality Control Engineer

Guardrail File





Bob Riley

Governor

ALABAMA DEPARTMENT OF TRANSPORTATION

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Joe McInnes Transportation Director

July 6, 2007

Ms. Ellen Engleman Conners Chairman, National Transportation Safety Board 490 L'Enfant Plaza, SW Washington, D. C. 20594

Dear Ms. Conners:

RE: Safety Recommendation H-04-15

We have reviewed the NTSB recommendation resulting from the crash associated with the anchored in-backslope terminal. Safety Recommendation H-04-15 states that the State Department of Transportation identify guardrails with anchored-in-backslope terminals and replace any that create a situation similar to a turned-down terminal.

The Department has taken the following action:

- 1. Revised our anchored-in-backslope terminal (ALDOT's Type 9 end anchor) to be in accordance with the NCHRP Report 350 tested anchor.
- 2. Advised Department personnel to identify in place anchored-in-backslope terminals that are inside the clear zone for replacement with an appropriate guardrail approach end anchor and guardrail length of need as part of the next resurfacing project or other appropriate work effort.

We believe this addresses Safety Recommendation H-04-15. Please advise if additional information is needed.

Sincerely,

D. J. McInnes

Transportation Director

DJM/SEW

cc: D. W. Vaughn

Rex F. Bush

Don T. Arkle

G. M. Harper